

REMARKS

Claims 1-9 remain in this application. Claims 1-3, 5 and 7-9 have been amended.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with Markings to Show Changes Made.**"

The Examiner's indication of allowability of claims 3 and 4, if rewritten in independent form, is acknowledged and appreciated.

Claim 5 stands objected to because of informalities. The claim has been amended in a readily apparent manner to overcome the objection.

Claims 1 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Maxham in view of Abate. Applicants respectfully traverse this rejection because the cited references, alone or in combination, do not disclose or suggest the high-power amplifier stage connected to at least one of the first and second amplifier stages of the base amplifier arrangement, as now described in claim 1.

Claim 1 describes a cascadable optical amplifier arrangement including a modular base amplifier arrangement having at least a first amplifier stage and a second amplifier stage. A high-power amplifier stage is connected to at least one of the first and second amplifier stages.

Maxham discloses a method for providing a bi-directional supervisory channel for an optical network element which includes two optical supervisory channel modules (14a1, 14a2), which are connected to a first and a second two-stage amplifier module 30, 32 (see Fig. 3). Each of the two stage amplifier modules is responsible for the amplification of the received optical signals in one transmission direction. Each two-stage amplifier module, for example, the amplifier module 30, consists of one pre-amplifier stage 43a and one post-amplifier stage 27. The Maxham reference does not disclose or suggest any other amplifier being connected to the amplifier stages of the two-stage amplifier module.

In the present invention, a high-power amplifier stage is connected to at least one of the first and the second amplifier stages of the modular base amplifier arrangement. This arrangement, as now described in claim 1, is not disclosed or suggested in the Maxham reference.

The Abate et al. reference discloses a single mode fiber multiplexer 120 in an optical transmitter 100. This reference also does not disclose or suggest the high-power amplifier stage

being connected to at least one of the first and second amplifier stages as in the present invention. As such, even if combined, the cited references still would not disclose or suggest this feature of the present invention. For this reason, independent claim 1 is allowable over Maxham and Abate et al. Claims 2-9 depend from claim 1, and are also allowable for the same reasons given with respect to claim 1.

Claims 2, 5-7 and 9 stand rejected further under 35 U.S.C. § 103(a) as being unpatentable over Maxham in view of Abate and further in view of Meli or Sakano. These claims depend from claim 1 and are allowable for the same reasons given with respect to claim 1, and because of the additional features recited in these claims.

In light of the above, Applicants respectfully submit that independent claim 1, as well as claims 2-9 which depend therefrom, are both not anticipated and non-obvious over the art of record. Accordingly, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 1-3, 5 and 7-9 have been amended as follows:

1. (Amended) A cascable optical amplifier arrangement, comprising:
a modular base amplifier arrangement constructed in single-mode technology and having at least ~~one~~ a first amplifier stage and a second amplifier stage; and
a high-power amplifier stage connected to ~~the~~ at least one of the first and second amplifier stage stages of the base amplifier arrangement and having an active fiber and a least one pump signal source.
2. (Amended) The cascable optical amplifier arrangement as claimed in claim 1, wherein at least one further high-power amplifier stage having an active fiber and a least one pump signal source is connected to the high-power amplifier stage that is connected to the base amplifier arrangement.
3. (Amended) The cascable optical amplifier arrangement as claimed in claim 2, wherein the high-power amplifier ~~stages~~ stage and the further high-power amplifier stage each have their own amplification control and/or power control.
5. (Amended) The cascable optical amplifier arrangement as claimed in claim 1, wherein the high-power amplifier ~~stages each have their own~~ stage has an amplification control and/or power control.
7. (Amended) The cascable optical amplifier arrangement as claimed in any one of claims ~~1~~ 2 to ~~6~~ 4, wherein the at least one pump signal ~~source~~ sources for pumping the active fibers of the high-power amplifier stages ~~is~~ are connected to the input and to the output of the respective active ~~fiber~~ fibers.

8. (Amended) The cascable optical amplifier arrangement as claimed in any one of claims ~~1~~ 2 to ~~6~~ 4, wherein a filter serially connected upstream of the active ~~fiber~~ fibers of the high-power amplifier stages levels the gain spectrum of an optical signal to be amplified.

9. (Amended) The cascable optical amplifier arrangement as claimed in ~~claim 7~~ any one of claims 1, 5 and 6, wherein a filter serially connected upstream of the active fiber of the high-power amplifier ~~stages~~ stage levels the gain spectrum of an optical signal to be amplified.